Revised Program

Certificate Programs
at the
HHSDC Training Center

DB2 Programmer Certificate

The Program

The HHSDC Training Center is offering the updated **DB2 Programmer Certificate.** The program consists of a core program of four classes. Students may earn the certificate by completing all of the core classes:

- *Introduction to DB2 Concepts*
- *DB2 Programming (Beginning)*
- *DB2 Programming (Intermediate)*
- *DB2/SQL Advanced Concepts*

The program teaches DB2 in a z/OS environment.

If you have completed any of these identical courses at HHSDC in prior years they will count towards earning the certificate.

These courses may also be taken as stand-alone classes. Some prerequisites apply.

How to Obtain a Certificate

While you are on site attending the final course in your program, notify the HHSDC Training Office that you are about to complete the program. A special certificate will be prepared and awarded to you upon completion of the final class.

Tuition Discount

If you complete the program within an 18-month period, you will receive 10% off the total tuition. The total discount will be taken in the final class. The discount will apply to anyone who completes this revised program after July 1, 2004 and within the required 18-month timeframe.

How Will This Program Benefit My Organization?

Please see Page 4 for a description of the benefits attained by your organization if you complete this program.

**HEALTH & HUMAN SERVICES
DATA CENTER
HHSDC Training Center**
9323 Tech Center Drive, Ste. 100
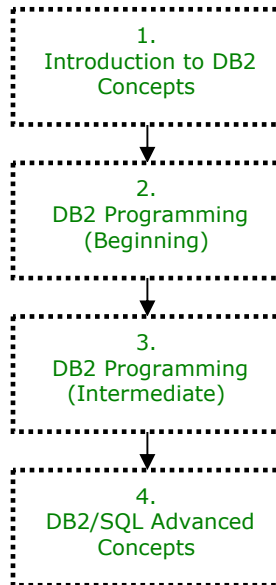Sacramento, CA 95826
(916) 739-7502
FAX: (916) 739-7779
TDD: (916) 454-7226

HHSDC
California Health and Human
Services Agency Data Center

DB2 Programmer Certificate

```
┌─────────────────────────────────┐
│   Recommended Sequence of       │
│          Courses                │
└─────────────────────────────────┘
```

```
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        1.
  Introduction to DB2
      Concepts
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
          │
          ▼
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        2.
   DB2 Programming
     (Beginning)
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
          │
          ▼
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        3.
   DB2 Programming
    (Intermediate)
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
          │
          ▼
┌ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┐
        4.
  DB2/SQL Advanced
     Concepts
└ ─ ─ ─ ─ ─ ─ ─ ─ ─ ┘
```

These courses may also be taken individually without working towards a certificate. Some prerequisites apply. If you have any questions please call us at (916) 739-7502

Schedule of Classes – July 2004 through June 2005

Course Title	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Introduction to DB2 Concepts							31					
Db2 Programming (Beginning)								1-4				
Db2 Programming (Intermediate)										4-7		
DB2/SQL Advanced Concepts											2-4	

Tuition shown is before discount

Required Prerequisites:

The following skills are required before beginning this certificate program:

- **Basic COBOL programming skills**
- **Basic TSO/ISPF skills**
- **Basic z/OS JCL skills**

All of these skills are available through classes at the HHSDC Training Center

Introduction to DB2 – This 1-day course
presents the basic structure, concepts, and facilities of the DB2 UDB for z/OS database management system and introduces Structured Query Language (SQL). Other subjects covered include relational database concepts, security design, concurrency concepts, database components, available administration and development facilities, catalog tables, and unit-of-work processing with commit and rollback. Factors that affect the performance of DB2 applications and the use of z/OS system resources are explained and options for application performance monitoring and tuning are discussed. **$225 per student.**

DB2 Programming (Beginning) – This 4-day
course presents the fundamentals of coding Structured Query Language (SQL), including data manipulation, data definition and data control. The basic DB2 components (database, table, index, view, etc.) are defined and basic DB2 utilities are introduced for loading and backing up DB2 data and capturing data statistics. The structure of a DB2/COBOL program and the SQL statements it requires is discussed and efficient coding techniques are presented that ensures the optimum use ofDB2 application and system resources.

Hands-on workshops are used to reinforce concepts. **$825 per student.**

DB2 Programming (Intermediate) – This
4-day course presents the next level of sophistication in coding Structured Query Language (SQL) for the intermediate-level SQL programmer. The SQL set operations of UNION, INTERSECTION and DIFFERENCE are taught along with a focus on multi-table inner joins and outer joins. The SQL statements and the structure of the example DB2/COBOL program assist the participant in solving more complex business problems. Efficient coding techniques are presented that ensures the optimum use of DB2 application and system resources. Hands-on workshops are used to reinforce concepts. **$875 per student.**

DB2/SQL Advanced Concepts – This 3-
day course presents advanced coding and application tuning techniques for Structured Query Language (SQL) in the DB2 UDB for z/OS environment. All types of SQL operations and statements are analyzed and ways of improving application efficiency are discussed. The access path information for various SQL statements is presented and the use of indexing to improve performance is explained. Efficient coding techniques are presented that ensures the optimum use of DB2 application and system resources. Hands-on workshops are used to reinforce concepts. **$675 per student.**

Organizational Benefits for Attending the
DB2 for z/OS Enterprise Developer Certificate Program

This program will benefit your organization by teaching a programmer the DB2 for z/OS coding techniques that will allow you to:

- Improve the quality and efficiency of new and existing DB2 SQL statements and DB2 COBOL-based computer programs
- Reduce development time for new or changed COBOL-based DB2 programs
- Expand programmers' knowledge of distributed DB2 programming techniques, including remote stored procedures, triggers, user-defined datatypes, and user-defined functions.
- Empower programmers to leverage their technical knowledge of DB2 to construct and support web-based application architectures

This unique program, taught at the HHSDC Training Center, will teach your technical experts the specifics of coding, tuning and maintaining high-quality COBOL-based DB2 for z/OS computer applications, including distributed and web-based. Specifically, these techniques assure quality — and cost savings — by teaching the developer how to analyze data requirements, design the DB2 program, code efficient SQL, prepare the program, select efficient processing options and test the resulting program for completeness, correctness and efficiency.

Train-Right instructors have been teaching DB2 and SQL for many years. Their extensive breadth and depth of knowledge in the DB2 arena makes them an excellent training provider for this certificate program.

REGISTRATION INFORMATION

Satisfaction guaranteed or your money back

To enroll in a class at HHSDC, please have your training coordinator call the HHSDC Training Center Registration Line at 739-7502. We will take all enrollment and billing information over the phone, then send the training coordinator written confirmation and a map to HHSDC for each student.

Cancellations of enrolled students must be submitted in writing via e-mail to training@hhsdc.ca.gov *by the training coordinator.* To avoid charges for late cancellations, the note must be received by **TEN (10) WORKING DAYS PRIOR TO THE FIRST DAY OF CLASS**. The full course fee will be charged for any cancellations received after the 10-working day deadline. Verbal cancellation notifications will not be accepted. Substitutions may be made at any time via telephone call.

The HHSDC Training Center is located at 9323 Tech Center Drive, Suite 100, in Sacramento. Tech Center Drive is located one block south of the intersection of Folsom Blvd. and Mayhew Road, between Bradshaw and Watt. The class will be in session each day from 8:15 A.M. to approximately 4:30 P.M. Plenty of free parking is available.